

ABSTRACT OF THE DISCLOSURE

A drive current supply circuit is provided in which the speed of rise of the drive current to a laser diode is increased. In a drive current supply circuit for supplying drive current I to load 50Ω connected with the line $1R$ of two parallel lines $1R$ and $2R$ of a first current mirror circuit 1, this drive current supply circuit is provided with a control circuit $CONT$ that controls the current i flowing in the other line $1L$ in accordance with first control signal $\Sigma\phi_1$ and the first control signal $\Sigma\phi_1$ comprises a steady DC component ϕ_D and a drive signal component ϕ_1 added to the DC component ϕ_D when desired.